#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024488 Address: 333 Burma Road **Date Inspected:** 07-Jun-2011

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Components

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

### **WELDING**

This QA Inspector observed the following work in progress:

Outside Yard – OBG Trial Assembly

This QA Inspector observed ZPMC qualified welding personnel identified as 069118 perform repair welding by Shielded Metal Arc Welding (SMAW), on Edge beam to Floor beam weld at panel point 126.5 of OBG Segment 14W. Weld joint is identified as SEG3020P-208. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-1G-FCM-Repair-1, which is used as per Welding repair report B-WR20970. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 067765 perform repair welding by Shielded Metal Arc Welding (SMAW), on Edge beam to Floor beam weld at panel point 126 of OBG Segment 14W. Weld joint is identified as SEG3020R-173. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-1G-FCM-Repair-1, which is used as per Welding repair report B-WR20970.

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This QA Inspector observed ZPMC qualified welding personnel identified as 069118 perform welding by Shielded Metal Arc Welding (SMAW), on Edge plate I Rib stiffener to Floor beam weld at panel point 126.5 of OBG Segment 14W. Weld joint is identified as SEG3020P-173. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2112-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066751 perform welding by Shielded Metal Arc Welding (SMAW), on Side plate I Rib stiffener to Floor beam weld at panel point 126 of OBG Segment 14W. Weld joint is identified as SEG3020R-145. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

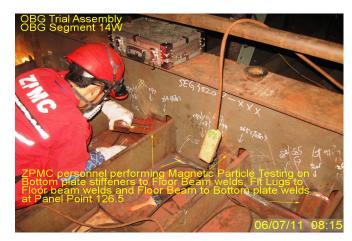
This QA Inspector observed ZPMC qualified welding personnel identified as 066326 perform repair welding by Shielded Metal Arc Welding (SMAW), on Edge plate to Deck plate weld between panel points 125.5 and 126.5 of OBG Segment 14W. Weld joint is identified as SEG3020-021. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1, which is used as per Welding repair report B-WR21150.

This QA Inspector observed ZPMC qualified NDT personnel perform Magnetic Particle Testing on Bottom plate I Rib stiffeners to Floor beam welds, Fit Lugs to Floor beam welds and Floor beam to Bottom plate welds at panel point 126.5 of OBG Segment 14W. See attached picture.

This QA Inspector observed ZPMC qualified NDT personnel perform Ultrasonic Testing on Deck panel diaphragm to Deck panel diaphragm welds at panel point 126.5 and 127 of OBG Segment 14W. Weld joint is identified as SEG3020P-006 and SEG3020M-008. One (1) Class A indication was marked by ZPMC NDT personnel on weld SEG3020P-006.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





# WELDING INSPECTION REPORT

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## **Summary of Conversations:**

No significant conversations were reported on this date.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Upadhye, Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer